

DAILY RECORD-UNION

WEDNESDAY, MARCH 4, 1862

The RECORD-UNION is the only paper on the coast, outside of San Francisco, that receives the full Associated Press dispatches from all parts of the world. Outside of San Francisco it has no competition in point of numbers, in its home and general circulation throughout the coast.

SAN FRANCISCO AGENCY.

L. P. FISHER is sole agent for this paper in San Francisco and vicinity. He is authorized to receive advertisements and subscriptions, and collect for the same. Rooms 21 and 22, Merchant's Exchange.

NEWS OF THE MORNING.

In New York yesterday Government bonds were quoted at 124 yesterday for is of 1867; 111½ for 4½; 31 84 for 87½; 101 for 8½ silver bars, 105½.

In London, 49½; consols, 98½; 5 per cent. United States bonds, extended, 169; 125½. 13½. 11½.

In San Francisco Mexican dollars are quoted at 85½.

The stock market opened flat in San Francisco yesterday morning, but firmer prices prevailed for the middle stocks. The Bodies were weaker.

A cotton dealer, Sunderland, Eng., yesterday had a frightful loss of life.

A shooting affray caused a sensation in Washington yesterday.

Brigadier-General W. R. Hazen is to be tried by court-martial in Washington for conduct prejudicial to good order and military discipline.

Ex-Senator Blaine's only sister died in Baltimore yesterday.

Count Guglielmo is to visit the German Catholic colony of Marienthal, Tex.

Vanderbilt has secured control of the West and Buffalo Railways.

Gadsden has recovered from his illness.

The British army now numbers 181,000 men.

A Protestant church near Stranor, Ireland, was destroyed by dynamite yesterday.

President Cleveland arrived in Washington yesterday morning.

The dwelling of Mrs. John Gwinne was burned at Menlo Park, San Mateo county, yesterday.

Fire destroyed the barn of William O'Hara, near Santa Paula, Ventura county, yesterday, together with eight horses, several hogs, and all of his crop of beans, hay, grain, etc.

The Navajo Senate has adopted the canal treaty with the United States.

An epidemic of disorder is predicted throughout the Indian country.

A line of pickets, composed of United States soldiers, to be established along the Rio Grande, in Texas.

The church and chapel on Mount Olivet, Long Island, will soon be in operation.

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The revised old Testament will not be issued until May.

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All passing freight trains on the Texas Pacific were stopped at Marshall, yesterday by the strikers, and to-day no passenger trains will be allowed to run.

During the two sessions of the Forty-eighth Congress, there have been introduced in the House 225 bills and 125 resolutions.

It is again asserted that rates of freight on fruit for the East will be greatly reduced soon by the railroads.

The inauguration of Grover Cleveland and Thomas A. Hendricks, President and Vice-President of the United States, takes place in Washington to-day.

THE USES OF FORESTS.

On "The Uses of Forests" F. K. Carey is contributing to the Chicago *Inter-Ocean* a series of valuable papers. Forestry is being more discussed at this time than any other subject of agricultural economy, and with decided profit to the people. Out of this general consideration we must expect there will be evolved a general forestry policy that will meet the needs of the country. Mr. Carey very appropriately points to the present agitation regarding forest preservation as compared to the inactivity of fifty years ago. The man who would have claimed attention for the subject half a century ago in America, would have been looked upon as a "cranky" theorist. But to-day the topic is a leading one, and has developed an inconceivable wise legislation. The people are beginning to understand the uses of forests to-day, as they are never understood them before. They are no longer regarded as mere supply for lumber, or as hindrance to the occupation and cultivation of lands. We are awaking fully to the meteorological value of trees. Mr. Carey quotes from a recent writer that "trees are heated and cooled by radiation, but very slowly, and hence the daily maximum and minimum of temperature they register occurs some hours after the same phases of temperature in the atmosphere. But, the radiation is not confined to a thin stratum of air; it is widely diffused, and hence the conserving influences of forests upon climate, making the nights warmer and the days cooler." So, too, evaporation from treeless soils is slow; the trees take up the moisture of damp soil, and hence it is that forests absolutely diminish the evaporation, and increase the humidity of climate within their influence. When rain falls upon unprotected soil it more speedily runs off to the drainage streams. But if tree-protected, the process is slow, and a part of the moisture is taken up by the roots and leaves, and thus percolates through the soil, and is dispersed into the atmosphere, again. It is settled then that trees increase the humidity of the atmosphere, and it is that true growth so immediately affects climate, and how it is that large areas devoid of forests are subject to the extremes of great heat and great cold; great precipitation of rain and excessive drought. Most rivers and springs rise in forests, and these latter preserve moisture in the soil. They are important factors in the integrity of streams and springs. Mr. Carey quotes the fact that in a region therefore rain less, Egypt by growing plants near the mouth of the Nile has occasioned plentiful rain. The deforestation of the mountains so affected the Oder and the Elbe, that navigators of those streams were forced to put on boats of very light draught. On Ascension Island a large spring was dried up by land clearing, but restored by reforesting. Forests, as we have said, lessen the liability of freshets upon rivers, most of which have their sources in forested mountains, and pass through woodlands in some of their reaches. The forests retaining moisture in the soil feed the rivers gradually, and prevent sudden floods upon them for water-carriage. They retain the snows also, and prevent sudden thaws, and thus avert disaster to rivers. Trees make a soil friable, and better able to retain moisture, and better able to distribute it. Without the forest the soil is liable to harden and resist penetration by rain, and hence deforested river sections experience rapid and dangerous rises in the streams. Whoever will study the character of the smallest stream that flows out of a woodland, will discover the operation of these laws. Mr. Carey asserts it to be a fact that suddenness and the dangerous character of freshets in the western and middle States annually aug-

ment. That the trouble is to be laid at the doors of forest destroyers and tree drainers is an accepted and established doctrine, fortified by physical facts and careful observations. In Switzerland the Government has very successfully experimented in forest growing as a means to reduce the fury and destructiveness of mountain torrents. George P. Marsh records that in France the result of planting 190,000 acres with trees, and the sodding of many acres, was the conversion of formidable torrents in many hundred ravines into tractable channels, while the soil has acquired such stability, that the violent rains of 1868, elsewhere so destructive, produced no damage in that district. Forests serve still other uses, one of which is to check the progress of air currents, and thus impede great wind-storms and lessen the force of hurricanes and cyclones. They modify also the effects of cold blasts, that so materially add to the frigidity of the atmosphere. Hurricanes and cyclones, it will be recalled, are practically unknown in regions clad with trees or broken by hills; and it is rare that a violent storm cuts a swathe through a forest—rare, when the whole forest area is taken into consideration with the meager evidences of such destruction. Forests preserve the air in them in a state of rest; as it has a large degree of humidity, it is more dense and less easily disturbed. To these factors are to be added the power of foliage and tree anatomy to resist the passage of great air currents. So it follows that the capacity of a forest to check a hurricane is relatively to its density and extent, and the height at which the storm passes. The recent frequent occurrence of cyclones and hurricanes in the West is attributable to recent forest destruction, since when they were frequent, and practically harmless.

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FROM FAR AND NEAR.

LAST HOURS OF THE REPUBLICAN ADMINISTRATION.

General Grant's Disease—Crematory on Long Island—The Texas Border—Foreign Affairs.

[SPECIAL DISPATCHES TO THE RECORD-UNION.]

DOMESTIC NEWS.

United States Senate.

Washington, March 3d.—A message from the House announced disagreement with the Senate on the sundry civil bill.

The Senate insisted on its amendments and the Clay bill, as proposed by the Conference Committee, Hail and Beck.

Hope had the Senate would agree with the House provision regarding the Oklahoma matter, and moved that the Senate from its records take up the bill for 122 against it.

The Senate insisted on its amendment, and the Clay bill was adopted.

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